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Attorney Docket No.: 5808.200-US

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Martin Lehmann Confirmation No: 4209

Serial No.: 09/488,265 Group Art Unit: 1652

Filed: January 20, 2000 Examiner: D. Ramirez

For: Improved Phytases

## AMENDMENT UNDER 37 C.F.R. 1.111

Commissioner for Patents  
Washington, DC 20231

Sir:

In response to the Office Action mailed October 31, 2001, please amend the above-identified application as follows (a marked up version pursuant to 37 C.F.R. 1.21 is attached hereto):

## IN THE ABSTRACT OF THE DISCLOSURE:

Please replace the abstract of the disclosure with:

This invention relates to improved phytases, preferably phytases of an increased thermostability, and a process of producing them. In particular, stabilizing amino acid mutations are introduced into a homologous protein, or the active site of a phytase is replaced in part or completely. The corresponding DNA sequences and methods of preparing them are also disclosed, as are methods of producing the improved phytases, and the use thereof. Specific variants of *Aspergillus fumigatus* phytase and of consensus phytases are disclosed.

## IN THE CLAIMS:

Please cancel claims 1-14 without prejudice or disclaimer. Please add new claims 15-26:

*Sub J2*  
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5. A phytase comprising an amino acid sequence which is at least 93.80% identical to the sequence of amino acid residues 1-467 of SEQ ID NO: 26, wherein the % identity is determined by GAP provided in the GCG program package.